DOCUMENT RESUME

ED 204 910 EC 133 377

AUTHOR Papazian, Clement F.
TITLE Common Misconceptions in the Use of Drugs for the Reading/Learning Disabled Child.
PUB DATE Jan 81
NOTE 14p.: Paper presented at the Annual Meeting of the Claremont Reading Conference (48th, Claremont, CA, January 16-17, 1981).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attention: *Drug Therapy: Elementary Secondary Education: *Hyperactivity: *Learning Disabilities: Reading Difficulties: *Stimulants

ABSTRACT

The author presents a "working model" approach to use with parents in explaining the nature of their reading/learning disabled child's problem, with particular emphasis on medication intervention. Ten misconceptions regarding attentional deficit disorder (ADD) are addressed: (1) a neurological examination and a brain wave test are essential in making the diagnosis of ADD: (2) all ADD youngsters should be put on stimulant drugs: (3) no ADD youngster should be put on stimulant drugs: (4) stimulant therapy will cause the child to become addicted to drugs: (5) "the medicine didn't work, so we stopped it:" (6) all children on drug therapy should have drug holidays: (7) stimulant drugs will stunt a child's growth: (8) there are other bad side effects to stimulant therapy: (9) hyperactives outgrow their problem and need for stimulant therapy: and (10) the prognosis for ADD individuals as they approach adolescence and adulthood is poor. (SB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED204910

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

COMMON MISCONCEPTIONS IN THE USE OF DRUGS FOR THE READING/LEARNING DISABLED CHILD

48th Annual Claremont Reading Conference Yearbook

Claremont Graduate School

Claremont, California, January, 1981

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Clement E. Papazian

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Clement E. Papazian, M. D.

Department of Pediatrics
Kaiser Permanente Medical Center
Fontana, California

EC133377

Due to space limitations, this paper includes only a condensed discussion of the ten more common misconceptions presented during the Conference session.

INTRODUCTION:

There are many excellent books that present in-depth scientific over-views of the topics I will discuss in this paper[1,2,3]. I would like to present a "working model" approach which I use with parents when attempting to explain the nature of their child's problem. The explanation may not be completely and scientifically accurate, but in my practice, does work well in giving parents insight into the etiology of, and treatment for their child's difficulties. When new proven information becomes available, it is quite simple to adjust the "working model" appropriately. In addition, some statements made in this paper are based on my own 18 years of experience in working with over 3500 patients in our Learning Disability Clinic. I would suspect that certain points might be disputed by other professionals.

Basic to a discussion on misconceptions of drug use in the learning disabled child is an understanding of the nature of the youngster who is being considered for medication intervention. If one realizes that 24 hours a day an individual is continually stimulated from external and internal sources, it becomes obvious that there is , within the central nervous system, a mechanism which allows one to selectively "tune out" what he does not wish "to pay attention to". I call this function a "filtering box", in my explanation to parents. We all have a filtering box within our brains, and its efficiency improves with age up to adulthood.

Some individuals seem to have a filtering box which doesn't function as effectively as it should for their age. The reasons for this inefficiency are probably many, but often it appears to be a familial—hereditary characteristic, occurring mostly in males (but not exclusively so)[4]. Often we note that the difficulty occurs in fathers and sons, or maternal (and paternal) uncles and nephews. Brothers and occasionally first cousins will have very similar behavioral patterns and problems. The filtering box should not be considered as "broken" or abnormal, but rather as functionally inefficient -- as though it needed a "tuning up".

When this condition occurs in an individual, a pattern (or syndrome) of behavioral characteristics may be present to such a degree that one cannot perform as expected. Any one or combination of these characteristics may be present: Inattentiveness, distractibility, low frustration tolerance (a "short fuse" problem), impulsiveness (a "big mouth" problem), hyperactivity, aggressiveness, destructiveness, emotional lability, and perseveration (has trouble "turning it off" once he starts something)[5]. The main point I emphasize to parents is that this condition should be considered a physical one -- rather than a psychiatric ("emotional") one. I try to avoid words such as "neurological", "neurodevelopmental", "brain", or "dysfunction" because many parents get so upset when they hear these terms, that what follows is often not heard at all.

Practically all children with this condition will be emotionally upset to some degree because very early in their lives or their school years, they are out of step with most everyone else in their world. The emotionality, however, is not the cause of their condition, but rather a symptom. The emphasis made to the parents, then, is that the child's condition should be looked upon basically as something that is "physical" and not emotional in nature.

Of course the symptoms described above may also be observed in an individual who does have an emotional or psychiatric cause for his behavior. However, that child's concentration power functions normally in some, and defectively in other situations. The youngster we are attempting to identify has a condition in which the attentional defect pervades his daily existence and causes maladaptive behavior across diverse settings.

Most physicians dealing with these youngsters now refer to the condition as "Attentional Deficit Disorder, with or without Hyperactivity"[6]. Many of these youngsters have been labeled hyperactive, hyperkinetic, or just "hyper-kids"; but the terms are not good ones, because the basic characteristic that seems to get most individuals into difficulty is the short attention span and the associated distractibility. They may also have a lack of "tuning up" in other areas, i.e., some will have small and large muscle incoordination, balancing difficulties, visual motor perceptual deficiencies, difficulty understanding and expressing spoken language, or problems switching efficiently from written to spoken language and vice versa. Any combination of these disabilities may exist.

If behavioral, coordination, perceptual, and language problems are all in evidence, some physicians prefer the term Minimal Brain Dysfunction (MBD)[7]. If only reading and spelling disabilities are in evidence, the medical profession uses the term Developmental Dyslexia (Dyslexia)[8]. Educators and psychologists may prefer the terms "specific reading disability" or "specific learning disability". If only the behavior characteristics are present, and as stated above, the term "Attentional Deficit Disorder" (ADD) is used. Physicians have found that 60-70% of children who have ADD respond in a rather unusual manner to stimulant drugs, such as Dexedrine, Ritalin, and Cylert. These drugs increase their attention span,

decrease distractibility, decrease hyperactivity, and seem to have a beneficial effect on any of the other symptoms of the syndrome that may be present. There is strong scientific evidence to support this observation [9,10,11].

With the increasing use of drug therapy for ADD children, misconceptions, inevitably have arisen:

MISCONCEPTION #1:

A NEUROLOGICAL EXAMINATION AND A BRAIN WAVE TEST ARE ESSENTIAL IN MAKING THE DIAGNOSIS OF ADD

There are no specific neurological or electroencephalographic (brain wave) abnormalities that make the diagnosis of ADD[12]. The diagnosis is best made from the history, carefully obtained from parents and school personnel[13]. If associated perceptual, motor, and language problems are also present, neurodevelopmental delays may be found by the physician's examination and the psychologist's test profile[14,15]. These findings can aid in making the diagnosis of MBD or dyslexia.

MISCONCEPTION #2:

ALL ADD YOUNGSTERS SHOULD BE PUT ON STIMULANT DRUGS

Experienced physicians who are interested in these patients do not put all ADD children on stimulants. Other treatment modalities may be as effective or more appropriate for some of these youngsters. Many can be treated effectively with behavior modification programs, and some may benefit from dietary restrictions or modifications[16,17,18]. There is still much controversy about the latter approach, but I see no harm in dietary programs, if there is a physician who is willing to evaluate and supervise a specific dietary plan.

MISCONCEPTION #3

NO ADD YOUNGSTER SHOULD BE PUT ON STIMULANT DRUGS

If a physician has experience in the use of the drugs for treating ADD; and if the child, parents, and school officials understand the role of stimulant therapy in the overall treatment plan for the youngster, stimulant medication intervention can play a significant role. The stimulant drug therapy is symptomatic, i.e., it does not cure anything, but merely removes or lessens symptoms. The stimulants increase attention span, but they do not make the child concentrate better — they merely allow him to if he is motivated to do so. The encouragement necessary for his initiating specific activities, and the heaping of praise upon him for being able to complete tasks successfully, depend upon the parents, teachers, and other important persons in the child's life. The underlying basic plan must be to break the student's previous "failure-hassle-frustration" cycle, and to initiate and perpetuate a "success-praise-motivation" cycle.

MISCONCEPTION #4

STIMULANT THERAPY WILL CAUSE THE CHILD TO BECOME ADDICTED TO DRUGS

Stimulants do not make ADD children euphoric or "high" — the drugs merely allow them to be more attentive[19]. There is no evidence in the medical literature that ADD children have any more problems with addiction in later life than the general population. I have treated over 3500 ADD children during the past 18 years, and have never detected any addiction problem in these patients as a result of stimulant therapy. Other physicians with many years of experience, anecdotally report the same. None would deny that long term studies in all aspects of treatment and followup are a continuing necessity in this field.

The irony of this misconception is that if a stimulant drug is withheld from a 6 or 7 year old ADD child because of fear of later addiction, the same youngster, years later suffering from chronic failure, frustration, and hostility, becomes high risk as a potential drug abuser. Again, I emphasize that other forms of treatment may be implemented in place of, or associated with drug treatment. The tragedy is if no intervention is sought by parents, or offered by professionals, during the early symptomatic years.

MISCONCEPTION #5

"THE MEDICINE DIDN'T WORK, SO WE STOPPED IT"

"Nothing happened when he was put on it"... "He acted like a zombie when he took his pills". Recent studies are supporting the empirical observations that effective dosages of stimulants are not necessarily related to the size or weight of the patient[20]. No response (good or bad) after initiating drug treatment means the dose is too low (assuming the patient has been taking the medicine as prescribed). The correct approach in such a situation is to increase gradually the dose until there is definite improvement or worsening of symptoms. On the other hand, the "zombie" response does not mean that the choice of drug is incorrect, rather, that the dose is too high, and should be lowered — not discontinued.

MISCONCEPTION #6

ALL CHILDREN ON DRUG THERAPY SHOULD HAVE DRUG HOLIDAYS

The basic reason for initiating stimulant therapy is to allow the individual more opportunity for success (by increasing attention span). As more success than failure is experienced, self concept improves; ultimately, a maturity level is

attained that allows the individual to maximize his strengths and minimize his weaknesses. For any given period of time, whether daily or weekly, the ADD student needs more success than failure experiences. That ratio should be the determining factor as to the need for no, partial, or full dose stimulant treatment--not whether it is Saturday, Sunday, summer vacation, or any other time.

MISCONCEPTION #7

STIMULANT DRUGS WILL STUNT A CHILD'S GROWTH

It is a fact that some youngsters on stimulants do show a decrease in height and/or weight growth. However, there are good studies in the medical literature which conclude that when stimulant treatment is discontinued or changed, there is a rebound to the previous rate of growth for height and weight[21]. It is the responsibility of the prescribing physician to routinely monitor growth parameters (as well as pulse rate, blood pressure, etc.), and make appropriate changes as necessary.

MISCONCEPTION #8

THERE ARE OTHER BAD SIDE EFFECTS TO STIMULANT THERAPY

There are occasionally slight and/or temporary side effects from stimulant treatment. These commonly include temporary irritability and "whininess" (initially), some loss of appetite (usually mild and temporary), and sleeplessness (the most frequent and persistent side effect, which can be controlled quite well with antihistamines before bedtime). Youngsters on Dexedrine often will look pale and have dark circles under the eyes (these symptoms are not dangerous and disappear when the drug is discontinued). As with any medication, idiosyncratic side effects

can occur. The physician's responsibility is to discuss thoroughly with the parents the more common side effect possibilities, and to assure the family of his ongoing committment and responsibility for the medication phase of their child's rehabilitation.

MISCONCEPTION #9

"HYPERACTIVES" OUTGROW THEIR PROBLEM AND NEED FOR STIMULANT THERAPY

There is increasing evidence that although hyperactivity diminishes as the individual grows older, the constitutionally limited concentration power persists[22]. ADD individuals often "wean" themselves off of stimulant therapy successfully. Others require lessening amounts to maintain maximum concentration efficiency. And still others do poorly everytime stimulants are reduced or discontinued. It is essential that whatever combination of management has proven effective should continued, regardless of age, as long as the need exists[22]. The physician must exert his influence upon the patient, his parents, and other professionals, as long as is necessary to maintain that philosophy.

MISCONCEPTION #10

THE PROGNOSIS FOR ADD INDIVIDUALS AS THEY APPROACH ADOLESCENCE AND ADULTHOOD IS POOR

From my personal experience, the outlook is neither pessimistic nor optimistic. If most of the ADD child's emotional, social, and educational needs are met so that he may grow in self confidence and emotional maturity, he will adapt adequately as an adult. As stated above, whatever combination of management

allows him to experience more success than failure should be continued as long as necessary. It is imperative that all interested professionals be aware of the many different programs and agencies that are becoming available in increasing numbers to aid ADD adolescents and adults.

CONCLUSION

I consider it a priviledge to be able to share my thoughts with those of you in disciplines other than my own. Educators, psychologists, language specialists, school nurses, physicians, as well as other professionals involved with ADD persons must strive to keep the lines of communication open. Only in that way can we hope to meet the ever-changing needs of these individuals and to allow them the opportunity to attain their true full potential.

REFERENCES

1. Wender, P.H., Minimal Brain Dysfunction in Children (Wiley-Interscience, 1971).

2. Safer, Daniel J., and Allen, Richard P., Hyperactive Children, Diagnosis and Management (University Park Press 1976).

3. Kinsbourne, M., and Caplan, P.J., Children's Learning and Attention Problems (Little Brown, 1979).

4. Safer, Daniel J., and Allen, Richard P., Hyperactive Children, Diagnosis and Management (University Park Press 1976), Page 21.

5. Laufer, M.W., and Denhoff, E., "Hyperkinetic Behavior Syndrome in Children", Pediatrics, 50, 1957, Page 463-474.

6. Cantwell, D., "The Hyperactive Child", Hospital Practice, January 1979, Page 65-73.

7. Clements, S., "Minimal Brain Dysfunction in Children", NINDB Monograph #3, (United States Public Health Service, 1966).

8. Critchly, Macdonald, The Dyslexic Child, (Chas C. Thomas 1970).

9. Milichap, J., and Fowler, G., "Treatment of Minimal Brain Dysfunction Syndromes", Pediat. Clin. N. Am., 14, 1967, Page 767-777.

10. Conners, C., et al, "Magnesium Pemoline and Dextroamphetamine: A Controlled Study in Children with Minimal Brain Dysfunction Syndrome", Psychopharmacologia 26, 1972, Page 321-336.

11. Safer, Daniel J., and Allen, Richard P., "Single Daily Dose Methylphenidate in Hyperactive Children", Dis. Nerv. Syst., 34, 1973, Page 325-328.

12. Satterfield, J., et al., "Intelligence, Academic Achievement, and EEG Abnormalities in Hyperactive Children", Am. J. Psychiat., 131, 1974, Page 391-395.

13. Safer, Daniel J., and Allen, Richard P., Hyperactive Children, Diagnosis and Management (University Park Press 1976), Page 17.

14. Werry, J., et al., "Studies on the Hyperactive Child VII. Neurologic Status Compared with Neurotic and Normal Children", Am. J. Orthopsychiat. 42, 1972, Page 441-451.

15. Ackerman, P., et al., "Children with Specific Learning Disabilities: WISC Profiles", J. Learn. Disabil., 4, 1971, Page 150-166.

16. Safer, Daniel J., and Allen, Richard P., Hyperactive Children, Diagnosis and Management (University Park Press 1976), Page 122.

17. Feingold, B., Why Your Child is Hyperactive (Random House 1975).

18. Swanson, J.M., and Kinsbourne, M., Rehabilitation, Treatment, and Management of Learning Problems, (University Park Press 1979).

19. Gross, M., and Wilson, W., Minimal Brain Dysfunction, (Brunner/Mazel, 1974).

20. Schain, R.J., and Reynard, L., "Observations on Effects of a Central Stimulant Drug (Methylphenidate) in Children with Hyperactive Behavior", Pediatrics, 55, 1975, Page 709-716.

21. Safer, D., et al., "Growth Rebound after Termination of Stimulant Drugs", J. Pediat., 86, 1975, Page 113-116.

22. Swanson, J.M., and Kinsbourne, M., Rehabilitation, Treatment, and Management of Learning Problems, (Univeristy Park Press 1979).